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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/615,475   | 07/07/2003  | Vincent Dupaquis     | ATM-214             | 9328             |
| 3897   | 7590        | 10/13/2006           | EXAMINER            |                  |
| SCHNECK & SCHNECK<br>P.O. BOX 2-E<br>SAN JOSE, CA 95109-0005 |             |                      | MAI, TAN V          |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2193                |                  |

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/615,475

Applicant(s)

DUPAQUIS ET AL.

Examiner

Tan V. Mai

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/23, 28/04, 3/29/04, 8/3/05</u> | 6) <input type="checkbox"/> Other: _____  |

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1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims recite a method for performing a mathematical function.

"[t]o satisfy section 101 requirements, the claim must be for a practical application of the Sec. 101 judicial exception, which can be identified in various ways:

- . The claimed invention "transforms" an article or physical object to a different state or thing.
- . The claimed invention otherwise produces a useful, concrete and tangible result,...".

See "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" OG Date: 22 November 2005.

Since there is no physical transform to establish a practical application, a useful, concrete and tangible result appears to be lacking. Therefore, claims 1-7 are directed to a non-statutory process.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chevillat et al (IBM Tech. Disc. Bull.).

Chevillat et al disclose a multiplication circuit (12X12) having at least one operand (16 bit) wider than the multiplication circuit. The multiplication circuit comprises: multiplier & multiplicand registers, multiplier unit, ALU and ACCUM. It is noted that Chevillat et al do NOT show the claimed "accumulator having a size of **three words plus a number of carry bits**" feature; however, the feature is obvious to a person having ordinary skill in the art to use an accumulator having sufficient size to accommodate the desired final result of the multiplication circuit. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to design the claimed invention according to Chevillat et al's teachings because the device is a multiplication circuit capable of multiplying the operand(s) which is wider than the multiplication circuit as claimed.

4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over New et al.

New et al disclose, e.g., see Fig. 1, a multiplication circuit (32X32) having operands (64 bit) wider than the multiplication circuit. The multiplication circuit comprises: multiplier & multiplicand registers, multiplier array (120), adder (152) and "accumulator" (160, 166). It is noted that New et al do NOT show the claimed "accumulator having a size of **three words plus a number of carry bits**" feature; however, the feature is obvious to a person having ordinary skill in the art to use an accumulator having sufficient size to accommodate the desired final result of the multiplication circuit. It would have been obvious to a person having ordinary skill in the

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art at the time the invention was made to design the claimed invention according to New et al's teachings because the device is a multiplication circuit capable of multiplying the operand(s) which is wider than the multiplication circuit as claimed.

5. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rim.

Rim discloses, e.g., see Fig. 1, a multiplication circuit having operands wider than the multiplication circuit. The multiplication circuit comprises: multiplier & multiplicand registers, multiplier (S11), ALU (17) and accumulator (13). It is noted that New et al do NOT show the claimed "accumulator having a size of **three words** plus a number of carry bits" feature; however, the feature is obvious to a person having ordinary skill in the art to use an accumulator having sufficient size to accommodate the desired final result of the multiplication circuit. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to design the claimed invention according to Rim's teachings because the device is a multiplication circuit capable of multiplying the operand(s) which is wider than the multiplication circuit as claimed.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cited reference is art of interest.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan V. Mai whose telephone number is (571) 272-3726. The examiner can normally be reached on Mon-Wed and Fri. from 9:30am to 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki, can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is:

Official (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.



Tan V. Mai  
Primary Examiner